DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003739 Address: 333 Burma Road **Date Inspected:** 24-Aug-2008

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 1400 **OSM Departure Time:** 2300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Jiang Jian Fei No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG** and Tower

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe fabrication and perform Ultrasonic Testing (UT) of Orthotropic Box Girder (OBG) and Tower components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Assembly Shop Bay # 2

The Caltrans QA Inspector performed random UT verification of ZPMC Quality Control (QC) inspected and accepted longitudinal diaphragm to floor beam Complete Joint penetration welds. The QA Inspector performed UT verification of welds SEG-017C welds, 002 (R1) and 018 (R2), SEG 017B welds, 002 (R1) and 010 (R1), SEG 015B 028 (R1) and 002 (R1). QA also performed UT verification of ZPMC QC tested and accepted floor beam weld SSD13-PP036-135 (R1). The welds tested appeared to be in general conformance with AWS D1.5 table 6.3 and contract documents. See UT report TL-6027 generated on this date for further information.

Tower Heavy Machinery Shop Bay #2

The Caltrans QA observed ZPMC performing Ultrasonic Testing (UT) of Tower Skin Plate A longitudinal stiffeners CJP welds ESD1-SA107 F/J welds 6 and 11. No NDT notification was given prior to testing. When asked for the notification ZPMC QC informed Caltrans QA that testing preliminary to aid ZPMC welders in future welding. Numerous areas of Class A indications were noted on ESD1-SA107 F/J CJP welds. ZPMC QC stated that NDT notification would be given prior to final testing.

WELDING INSPECTION REPORT

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Sub Assembly Shop Bay #3

Caltrans QA designated locations for Radiographic Testing of Edge Plate Butt joint welds, EP105-001-001 and EP101-001-001. The QA inspector marked 300 mm locations on both of the 1430 mm long weld seams.

Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 138 1694 2685, who represents the Office of Structural Materials for your project.

| Inspected By: | Viars,Larry | Quality Assurance Inspector |
|---------------|-------------|-----------------------------|
| Reviewed By: | Lanz,Joe | QA Reviewer |